Course Description: Students in an advanced math course are there because they plan to go to college and want to prepare for college math. Many of them will take the ACT while in the advanced math class and, depending on the school they attend, will need to prepare for placement or credit tests in college algebra. This will be a rigorous and beneficial class to those who take it seriously. This course will prepare students for a college algebra course as well as a college trigonometry course. The course will be divided into eight units. Units 1-5 will cover material similar to a college algebra course, whereas units 6-8 will focus on preparing students for a college trigonometry course.

Unit 1: Functions
Unit 2: Polynomial and Rational Functions
Unit 3: Exponential and Logarithmic Functions
Unit 4: Sequences and Series
Unit 5: Conics and Parametric Equations
Unit 6: Trigonometry of Triangles
Unit 7: Trigonometric Functions
Unit 8: Additional Topics in trigonometry


ID Badges: As per the student handbook, ID badges must be worn around the neck before a student can enter the classroom. Students without an ID badge cannot enter the classroom. Those students must go and get a temporary ID. If a student is caught with another students' badge, then they will be reported to Dr. Dawson and disciplinary action will be taken.

Materials: Students are expected to be prepared for class every day. These items must be brought to class. The rest should be kept at home to be used as needed.

- 3-ring Binder (for math only, 1 inch is recommended)
- Loose - leaf paper (at least 1000 sheets, no perforated pages from a spiral notebook)
- Pencils - at least 5 sharpened pencils every day for homework, classwork, quizzes, and tests (mechanical pencils are recommended)
- Personal pencil sharpener (in a small ziplock bag)
- Red Pens (for checking homework)
- Highlighters
- *2 Manilla File Folders (Letter size, ivory colored only)
- *Speckle book (4 speckle books, two for each semester's notes and two for each semester's Bellringers)
- *1 - 2 pocket folder with brads (cheaper the better)
- *2 dry erase markers
- *Item assigned for your class period
*will be kept in the classroom

The following supplies should be available at home for projects and various assignments:
- ruler, white glue, scotch tape, scissors, markers, crayons, and colored pencils
Testing: Tests will be rigorous as well as relevant and will match the material taught in class. Students are encouraged to form study groups and to continuously work throughout the unit. Trying to cram before an exam will almost always yield poor results. Tests will be about every 5-10 school days, with smaller quizzes in between.

Assignments: Students will be given a variety of assignments to determine their average in the course. Some of these include bell ringers, study guides, vocabulary cards, foldables; exit questions, quizzes, and of course, tests.

Homework: For many students homework is a problem. In math class, it is very important that homework be done every night. I have offered some incentives to encourage consistent homework from my students:
- **Homework is graded** - 4 points per assignment up to 100 points then it is 4 bonus points per assignment.
- **Homework will be relevant.**
- **Homework problems will mirror what is on the test.**
- **Homework problems will be challenging and at a college preparatory level.**
- **Homework questions will be answered the next day!**

*** Students who come prepared with homework almost always have much higher grades for the 9-weeks than those who miss even occasionally!

Grading: There will be several factors that contribute to a student’s grade in this course. Items to be graded include (but are not limited to) the following:
- Homework checks
- In class participation and group work
- Tests (5 - 7 per nine weeks)
- Quizzes (announced and unannounced): individual quizzes could range from 10-50 points
- Class activities
- Projects

**Grading Scale:**

- 100 - 93 A, 92 - 85 B, 84 - 75 C, 74 - 67 D, 66 or less F

Test Prep: As a college preparatory class, the students will be concerned with preparing for the ACT first and foremost. We will also prepare for exemption tests or CLEP tests that may be taken at individual universities. These exams will give the student college credit for the course without them having to spend the money for the course.

Behavior: Students are expected to maintain an atmosphere conducive to learning. Students are expected to do all assignments, projects and activities with complete cooperation and dedication. **No** student has the right to disrupt the learning of others. If a student participates in behavior that restricts others’ rights to learn, that student will be removed from the class immediately.

Dual Enrollment Options: This year we will cover the same material as a freshman-level developmental math course and a college algebra course, as well as an introduction to college-level trigonometry. There will be an opportunity for students to enroll in dual enrollment developmental math in the fall and/or college algebra in the spring, provided the student meets my pre-requisites and those of the granting higher education institution. Students who are enrolled in a dual enrollment course for this class in the fall and/or spring cannot be exempt from the first semester and/or final exam(s), regardless of the school policies for seniors. Additionally, students who do not score at least 70 on the first semester exam, earn a semester grade lower than a C for the first semester, or miss more than 7 classes during the fall semester will not be allowed to enroll in college algebra dual enrollment course in the spring. Exceptions to this will require a parent conference. Students and parents need to remember that dual enrollment classes affect a student’s TOPS G.P.A. Students should be committed to earning an A or B in the dual enrollment course to establish a solid TOPS G.P.A. when entering college.